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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/884,781	06/19/2001	Mark E. Peccn	CS90039C01	3361

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EXAMINER

LY, NGHI H

ART UNIT	PAPER NUMBER
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2686

DATE MAILED: 04/05/2004

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/884,781

Applicant(s)

PECEN ET AL.

Examiner

Nghi H. Ly

Art Unit

2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-5, 7-19, 23 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stephenson et al (US 6,119,000).

Regarding claims 1, 7, 10 and 23, Stephenson teaches a wireless communication system (see fig.1) comprising: a first network, a mobile user device exchanging data with the first network (fig.1, see "PSTN"), an interim identity generator, positioned in the mobile user device (Stephenson inherently teaches an interim identity generator, positioned in the mobile user device), generating an interim international

Art Unit: 2686

mobile equipment identity (IMEI) (see column 22, lines 52-64) in response to access by the mobile user device being prohibited (column 22, lines 43-51, see "a handset with no SIM inserted"), a first radio access network positioned along a first data path extending between the mobile user device and the first network (see fig.1, BTSs 18 connect with the PSTN), the first radio access network transmitting and receiving data exchanged between the mobile user device and the first network (see fig.1, wireless connection between MS 12 and BTS 18), and a first user identity module, positioned along the first data path (also see fig.1 and see column 22, lines 59-63), detecting the presence of the interim IMEI (also column 22, lines 59-63), wherein the interim IMEI is utilized for signaling exchanges requiring information corresponding to a SIM card while access is prohibited (column 22, lines 43-51, see "a handset with no SIM inserted").

Although Stephenson disclose an interim international mobile equipment identity (IMEI), while applicant's claimed invention recites an interim international mobile subscriber identity (IMSI). Stephenson and applicant's claimed invention both use the mobile identity to identify the mobile station when it registers to another network. Those skilled in the art thus would appreciated that Stephenson could be modified such that the IMEI can be used as the IMSI without changing the scope and spirit of Stephenson's invention.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Stephenson, in order to have another way of accessing to another network.

Regarding claim 2, Stephenson further teaches a first home location register for signaling exchanges utilizing an IMSI accessed from the SIM card (see column 8, lines 8-16), and a second home location register for signaling exchanges utilizing the interim IMSI (see column 9, lines 33-37).

Regarding claims 3, 14 and 17, Stephenson further teaches the mobile user device accesses the network along a circuit-switched path (see fig.1 and see column 5, lines 9-13).

Regarding claims 4, 5, 13 and 18, Stephenson further teaches the mobile user device accesses the network along a packet-switched data path (see fig.1 and see column 5, lines 19-22).

Regarding claim 8, Stephenson teaches the interim IMSI is generated using one or more of local information containing an international mobile equipment identity (IMEI) corresponding to the mobile user device see column 21, lines 52-64, a combination of identities that reside on the SIM card, and portions of identities that reside on the SIM card (see column 22, lines 42-51), instead of local information containing a pre-computed SPES, local information containing a pre-computed ciphering key as claimed. However, using local information containing a pre-computed SPES, local information containing a pre-computed ciphering key is known in the art.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Stephenson as claimed, in order to improve local information containing a pre-computed SPES, local information containing a pre-computed ciphering key..

Regarding claims 9, 11 and 27, Stephenson teaches the interim identity generator generates the IMSI in response to one of the SIM detector detecting a subscriber identity module card not being inserted within the mobile user device and the SIM detector detecting that service is barred (column 22, lines 43-51, see "a handset with no SIM inserted").

Regarding claims 12, 15 and 16, Stephenson teaches a first home location register for signaling exchanges utilizing an IMSI accessed from the SIM card in response to access by the mobile user device being prohibited (column 22, lines 43-51, see "a handset with no SIM inserted"). Stephenson does not specifically disclose a second home location register for signaling exchanges utilizing the interim IMSI, wherein the first user identity module directs the interim IMSI to the second home location register, and wherein the second home location register computes and transmits an authentication response triplet to the mobile user device upon receipt of the interim IMSI. However, to include a second home location register for signaling exchanges utilizing the interim IMSI, wherein the first user identity module directs the interim IMSI to the second home location register, and wherein the second home location register computes and transmits an authentication response triplet to the mobile user device upon receipt of the interim IMSI would have been obvious because the first network and second network have the same function.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Stephenson with the second network in order to expand the system coverage.

Regarding claim 19, Stephenson teaches the wireless communication system further comprising the first network is a packet-switched data network and the second network is a circuit-switched data network (see column 5, lines 9-22). Stephenson does not specifically disclose a second radio access network positioned along a third data path extending between the mobile user device and the first network, and along a fourth data path extending between the mobile user device and the second network.

However, to include a second radio access network positioned along a third data path extending between the mobile user device and the first network, and along a fourth data path extending between the mobile user device and the second network would have been obvious because the first network and second network have the same function.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Stephenson with the second network in order to expand the system coverage.

4. Claims 6, 20-22, 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stephenson et al (US 6,119,000) in view of Kulkarni et al US 5,862,481).

Regarding claims 6, 20 and 24, Stephenson teaches the interim IMSI includes a predetermined unused interim mobile country code (see column 8, lines 1-7), a predetermined unused interim mobile network code (see column 8, lines 1-7), and pseudo-random digits associated containing a portion of an international mobile

Art Unit: 2686

equipment identity (IMEI) associated with the mobile user device (see column 21, lines 52-64) and the interim IMSI (also see column 21, lines 52-64).

Stephenson does not specifically disclose the interim IMSI has a length of 15 digits.

Kulkarni teaches disclose the interim IMSI has a length of 15 digits (see column 4, lines 46-50 and column 5-9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to provide the teaching of Kulkarni into the system of Stephenson, because using 15 digits length would present more information.

Regarding claim 21, see claim 19 for the teaching of the modified Stephenson.

Regarding claim 22 and 25, see claim 8 for the teaching of the modified Stephenson.

Regarding claim 26, see claim 12 for the teaching of the modified Stephenson.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Mills, Jr. (US 6,665,529) teaches system and method for authenticating a cellular subscriber at registration.
- b. Leskinen (US 6,085,081) teaches method for allocating a user identification.
- c. Rollender (US 6,615,045) teaches method for transferring data upon request using permanent identifier.

Art Unit: 2686

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi H. Ly whose telephone number is (703) 605-5164. The examiner can normally be reached on 8:30 am-5:30 pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on (703) 305-4379. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nghi H. Ly

lao
23/30/04

Marsha D Banks-Harold
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